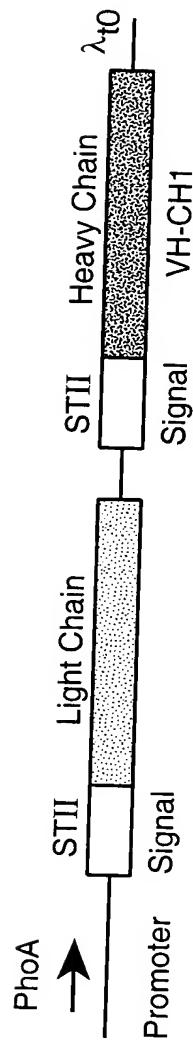
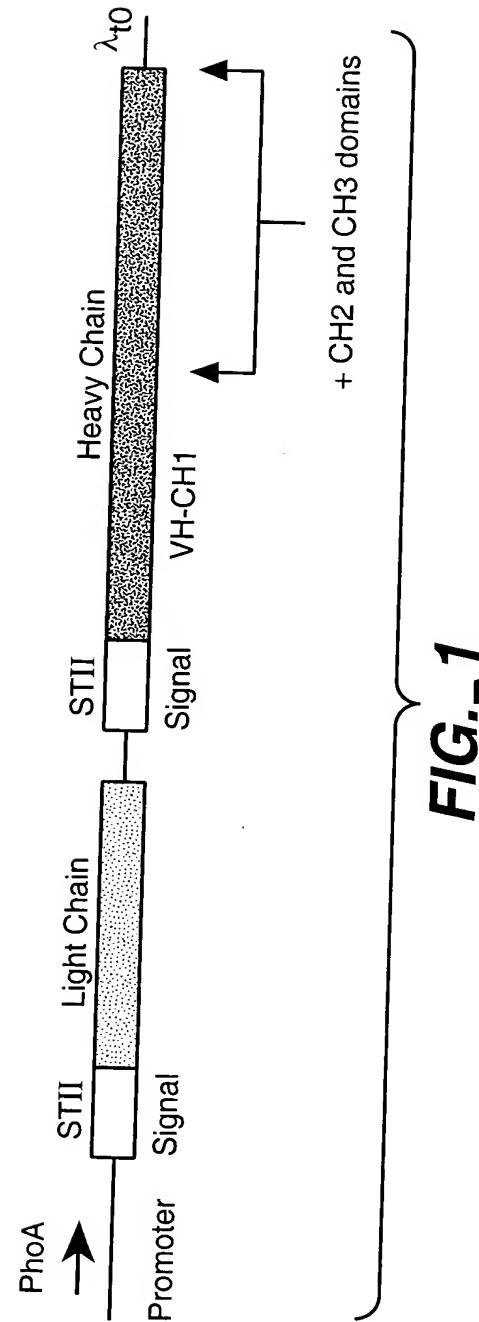
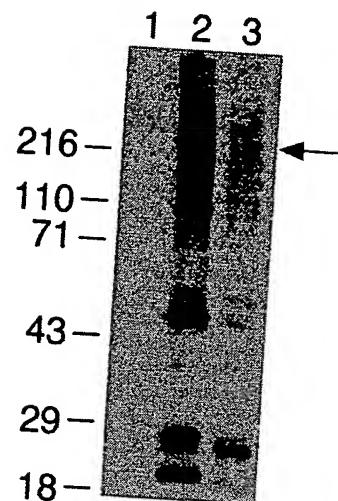
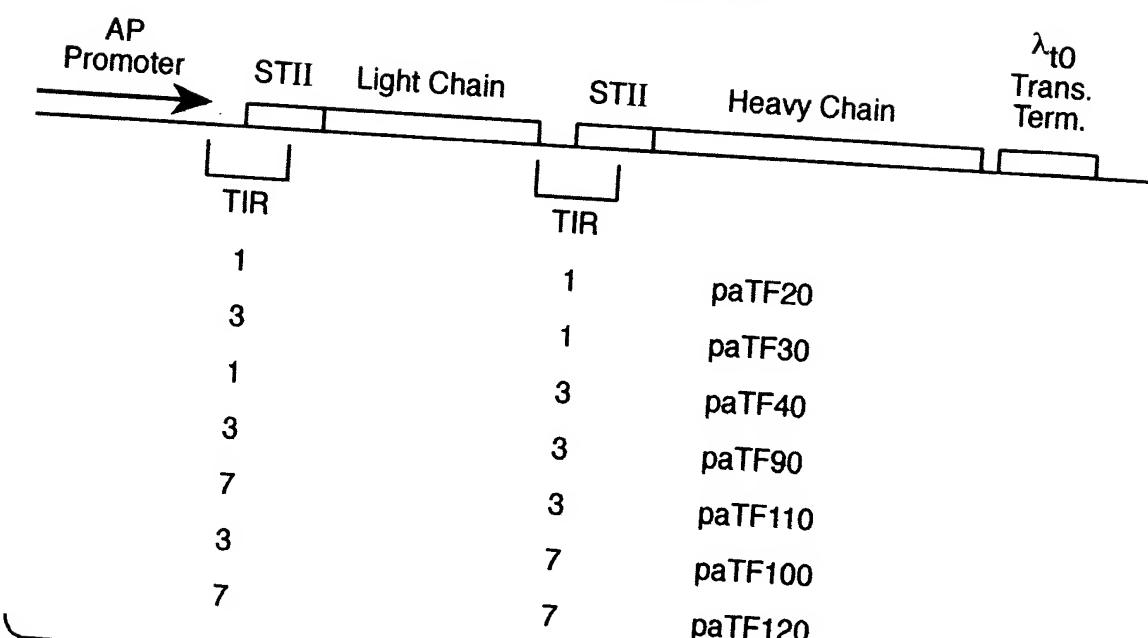


Fab Expression Vector pAK19



Full Length Antibody Expression Vector Derived from pAK19



**FIG._2****Polycistronic Constructs****FIG._3**

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FIG._4A

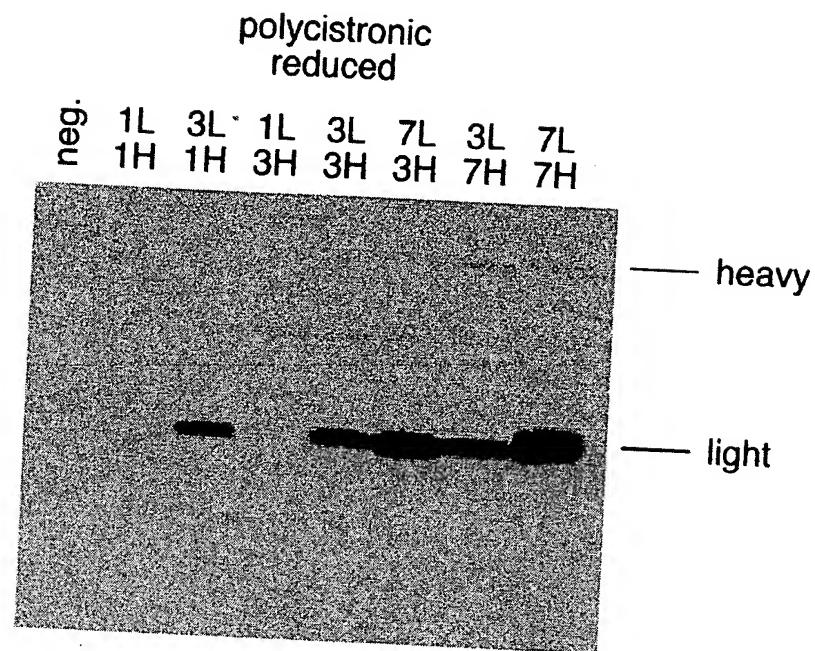
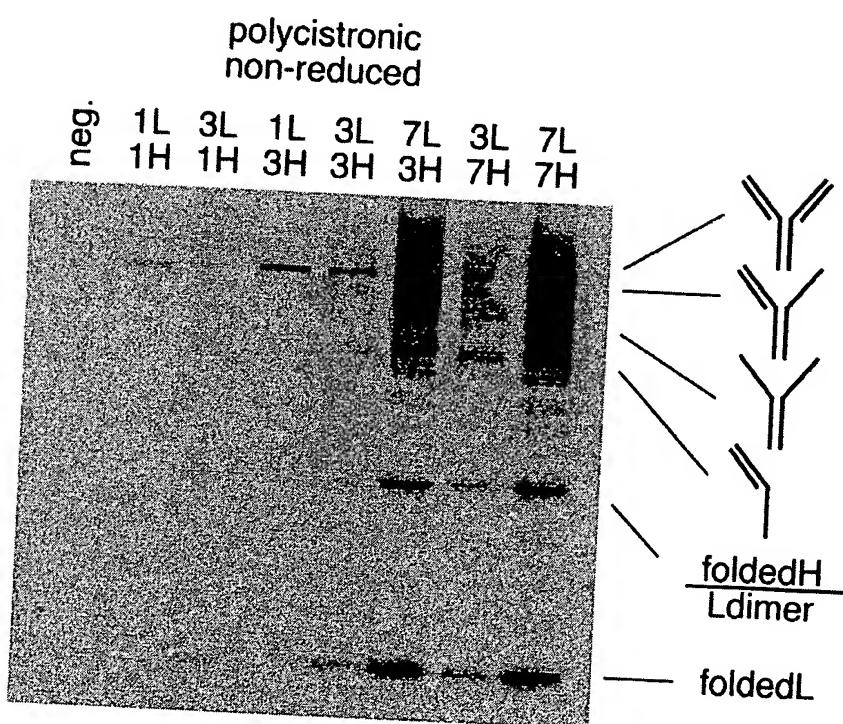


FIG._4B



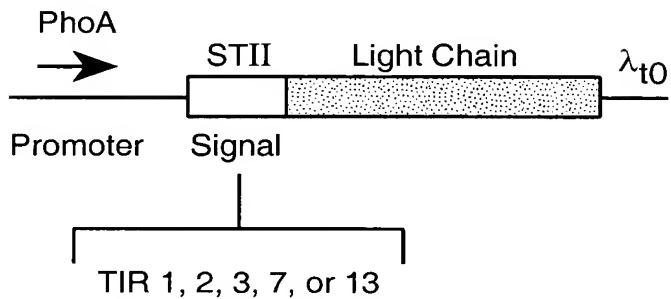
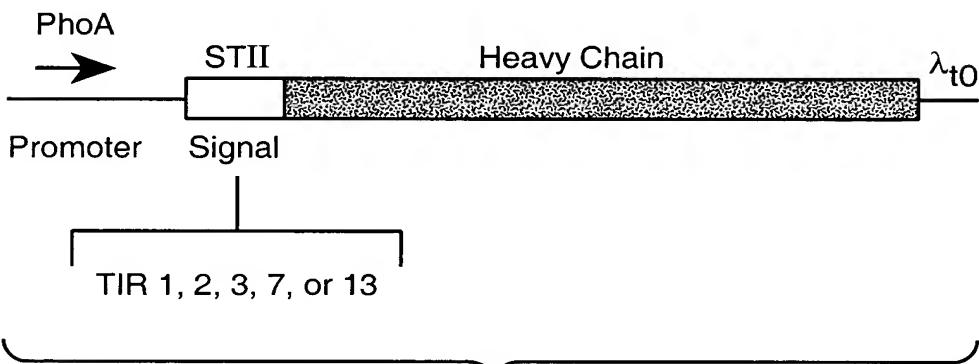
Light Chain Constructions**Heavy Chain Constructions**

FIG._5

P1793R1

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TIR
Relative
Strength

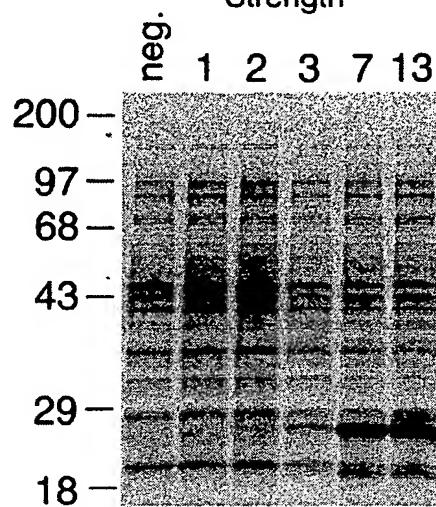


FIG._6A

TIR
Relative
Strength

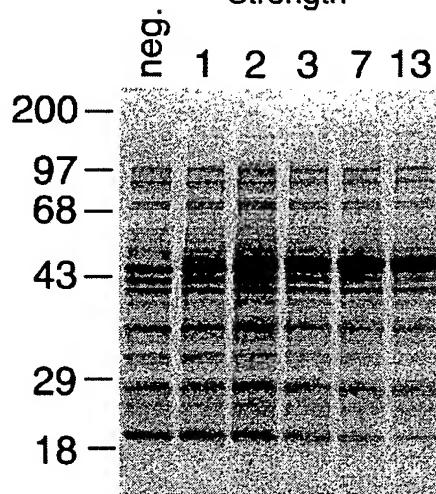


FIG._6B

negative
pxTF2AP77

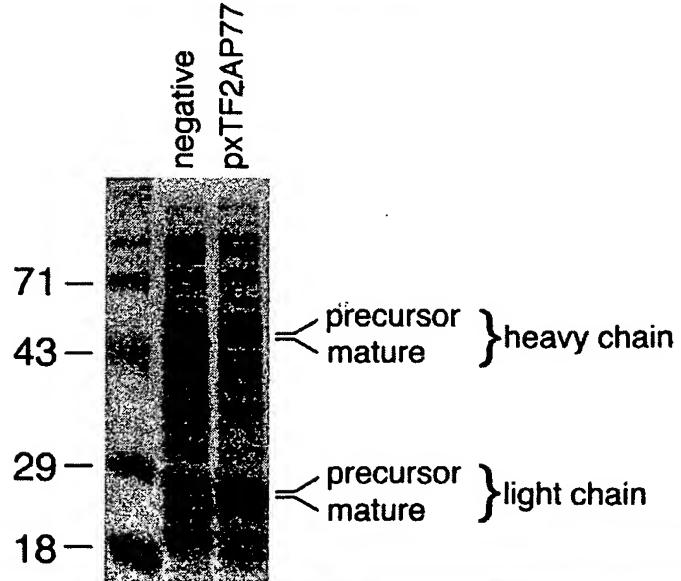
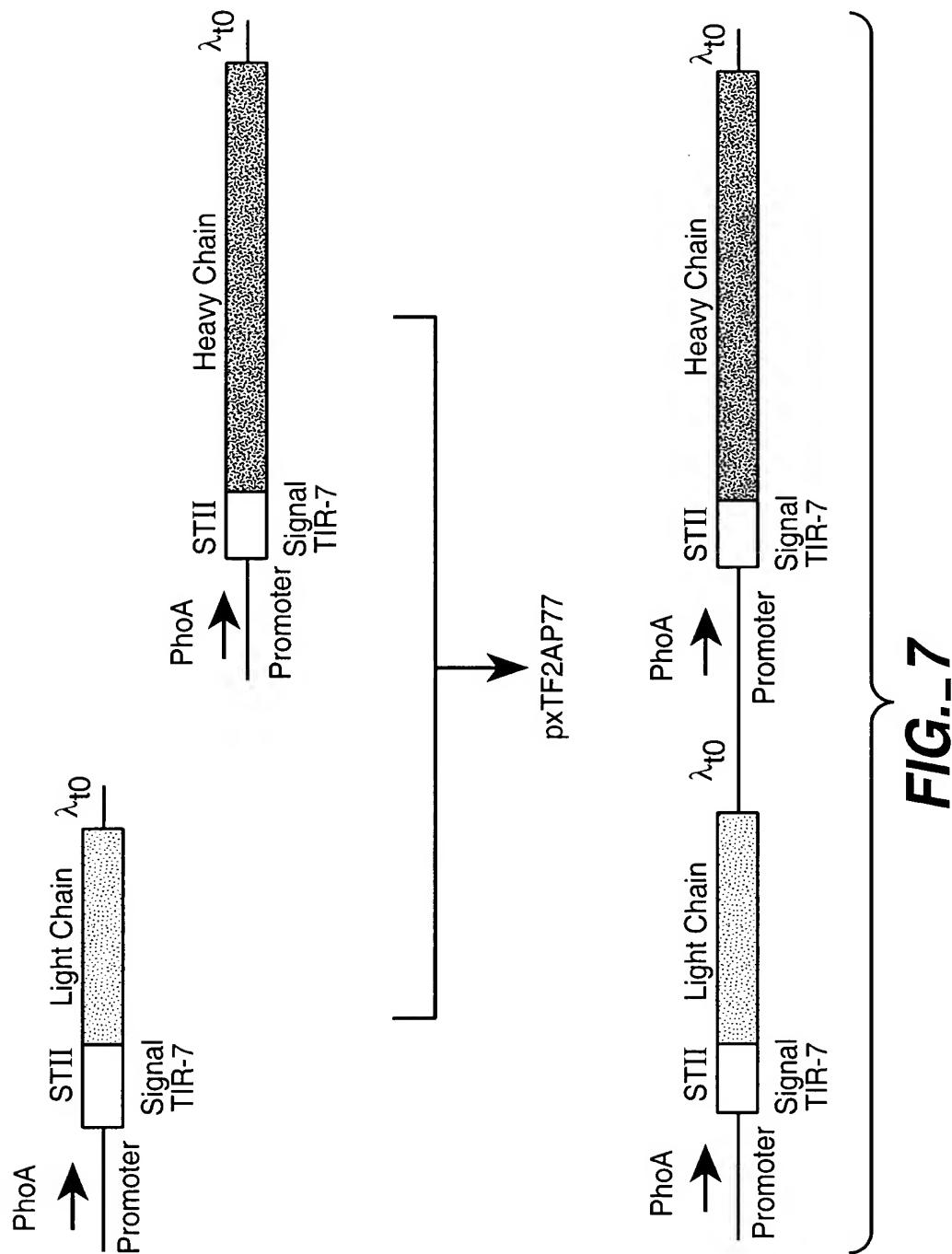
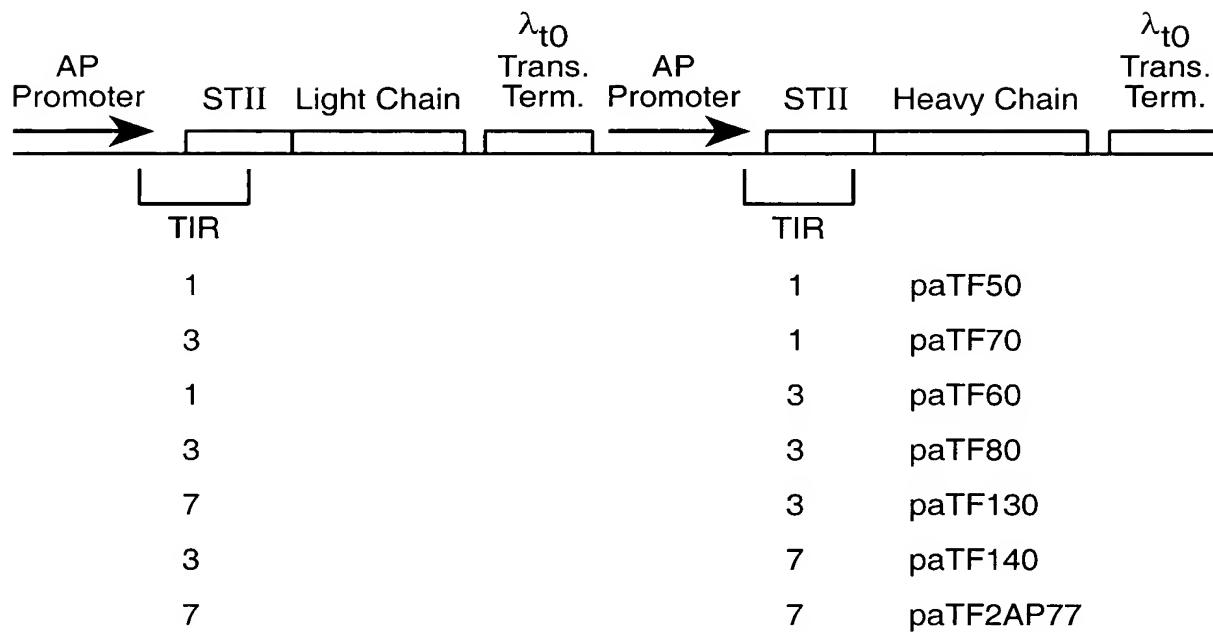


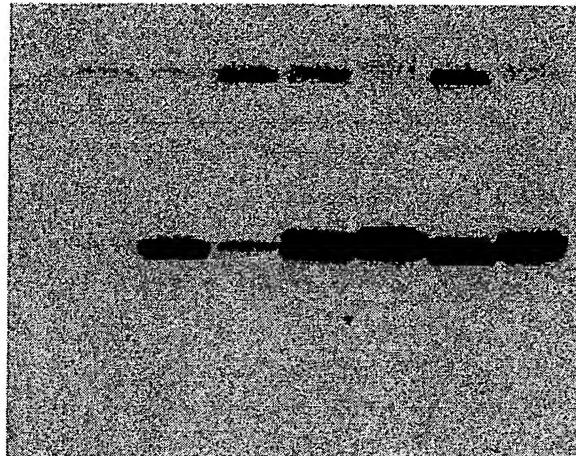
FIG._8



Separate Cistron Constructs**FIG._9**

separate cistrons
reduced

neg. 1L 3L 1L 3L 7L 3L 7L
1H 1H 3H 3H 3H 7H 7H



— heavy
— light

FIG. 10A

separate cistrons
non-reduced

neg. 1L 3L 1L 3L 7L 3L 7L
1H 1H 3H 3H 3H 7H 7H

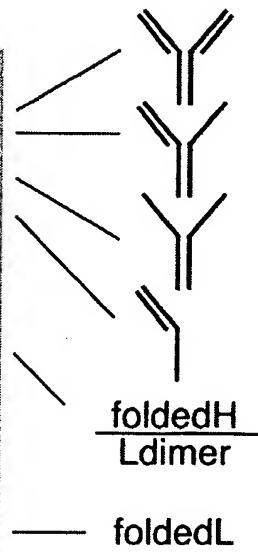
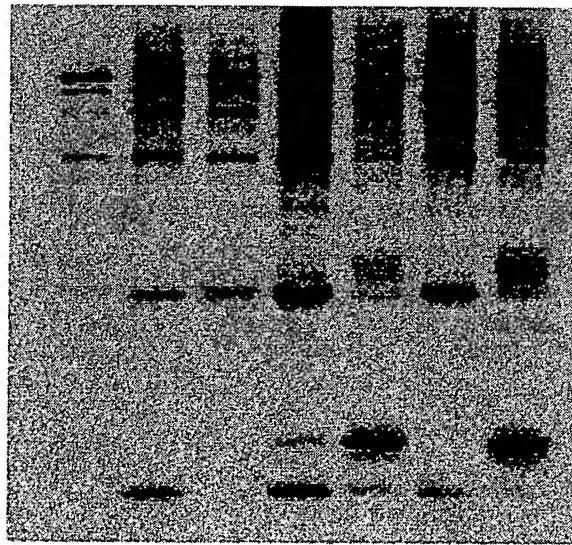
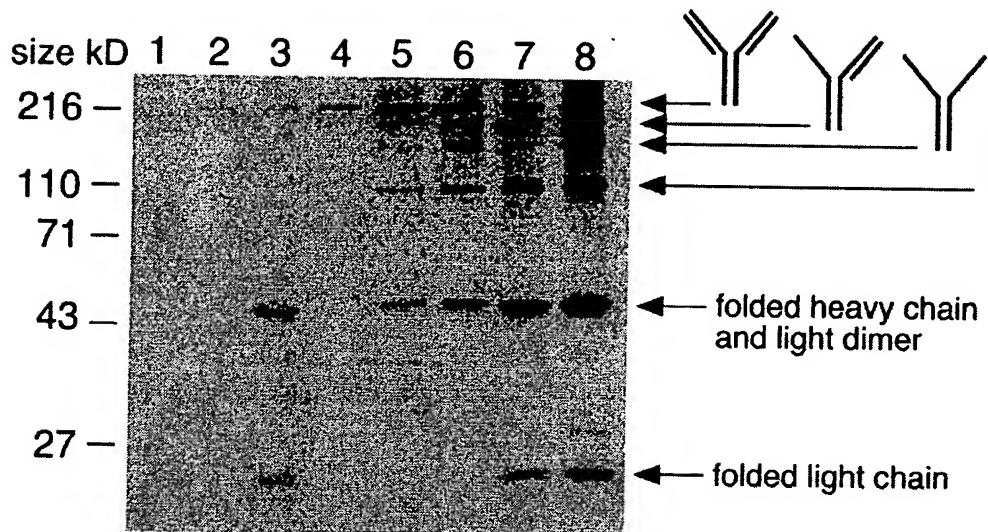
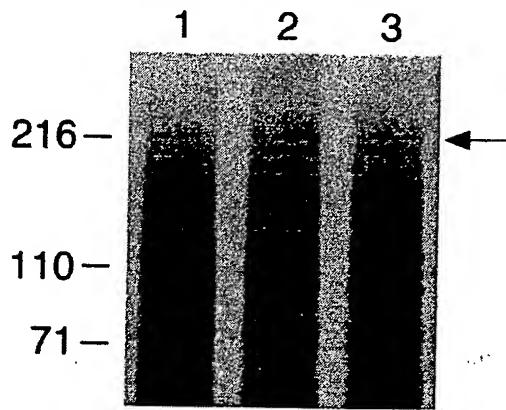


FIG. 10B



- 1) negative control
- 2) TIR 1-light, TIR 1-heavy, polycistronic
- 3) TIR 3-light, TIR 1-heavy, polycistronic
- 4) TIR 1-light, TIR 3-heavy, polycistronic
- 5) TIR 1-light, TIR 1-heavy, separate cistrons
- 6) TIR 1-light, TIR 3-heavy, separate cistrons
- 7) TIR 3-light, TIR 1-heavy, separate cistrons
- 8) TIR 3-light, TIR 3-heavy, separate cistrons

FIG._11**FIG._12**

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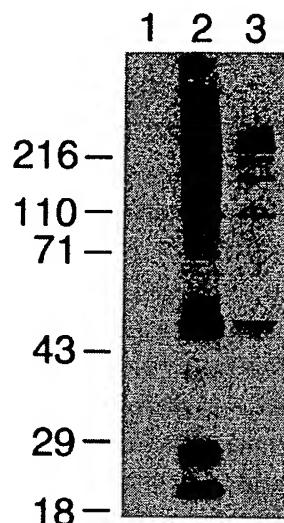


FIG._13

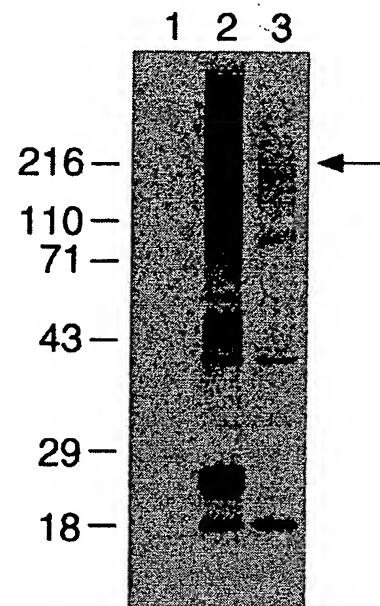


FIG._14

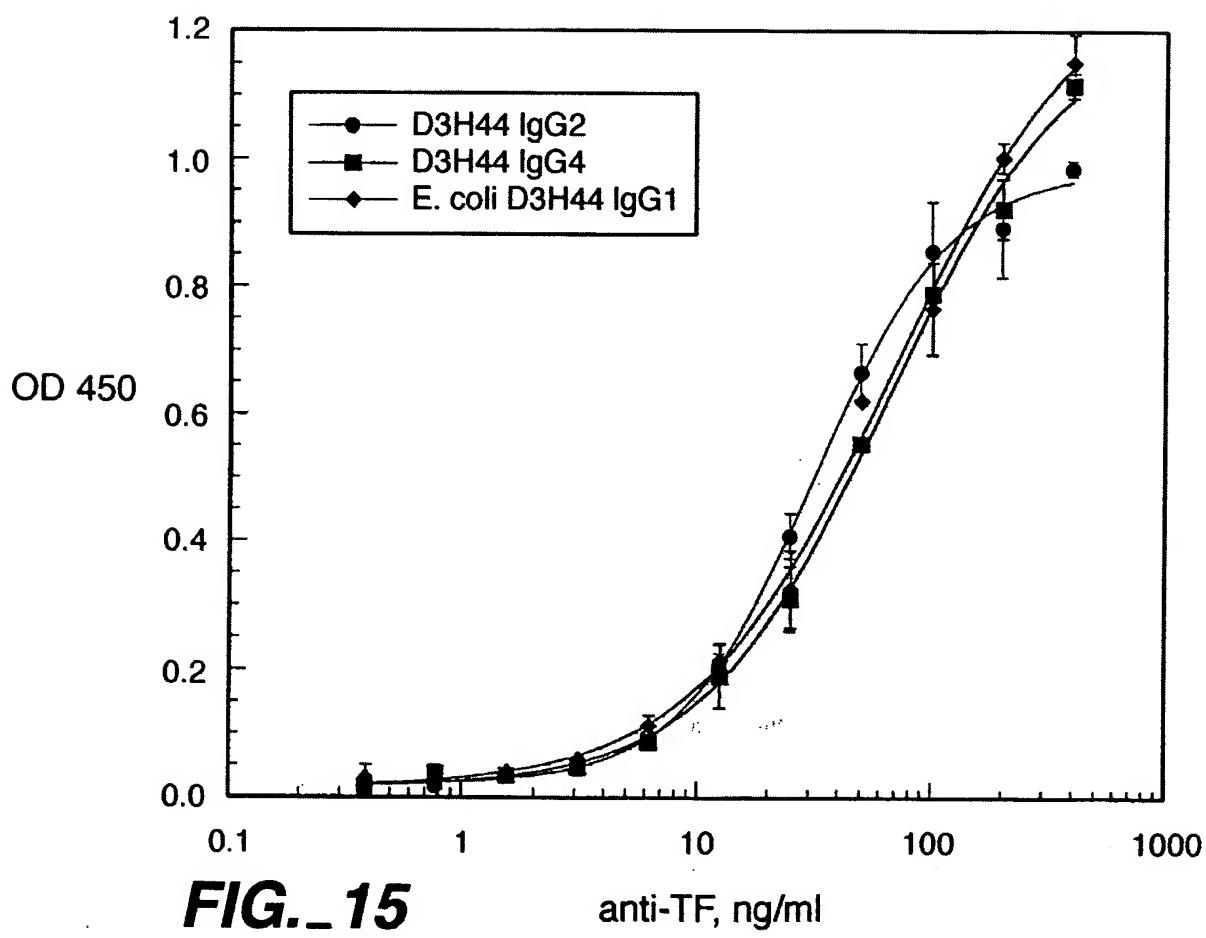
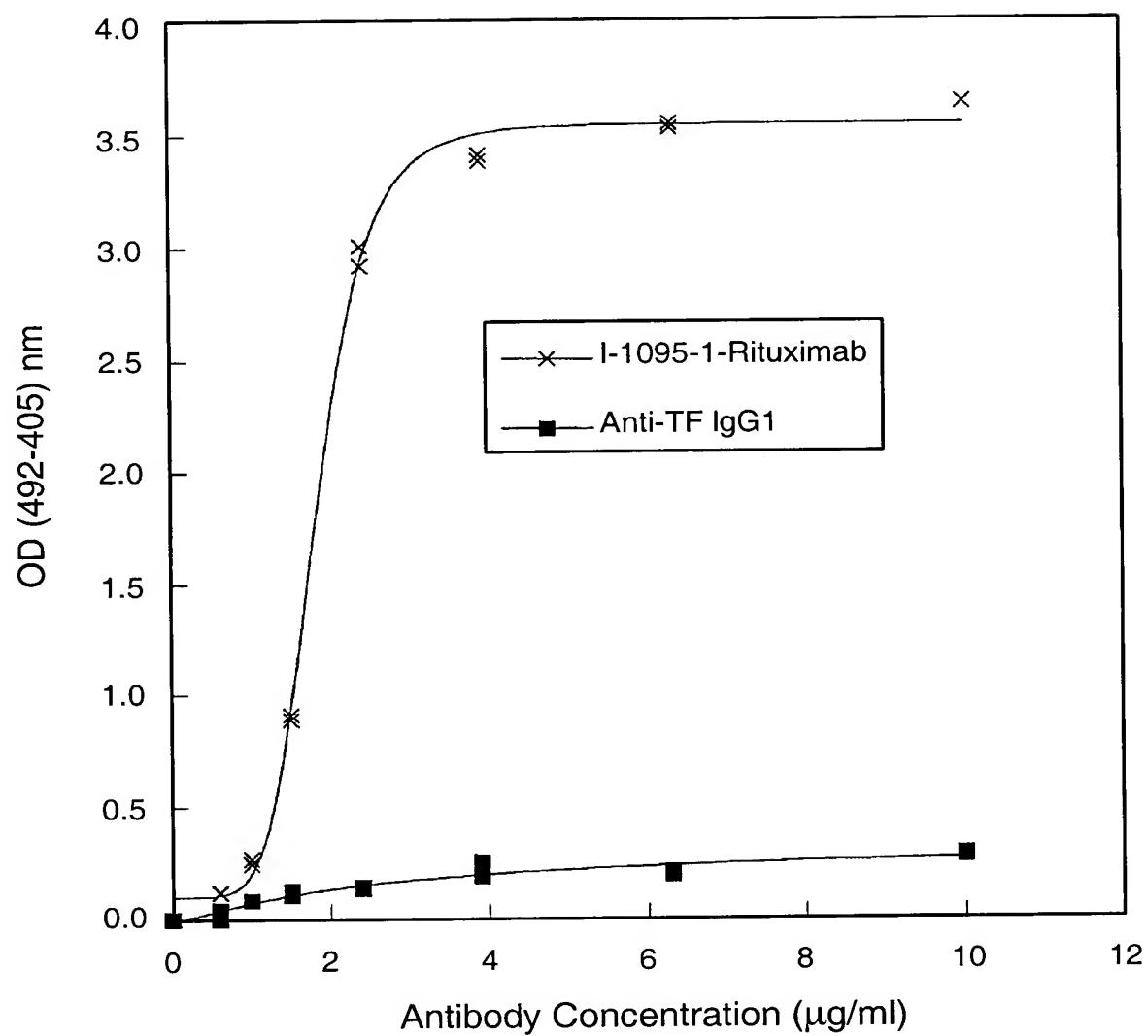


FIG._15

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**FIG._ 16**

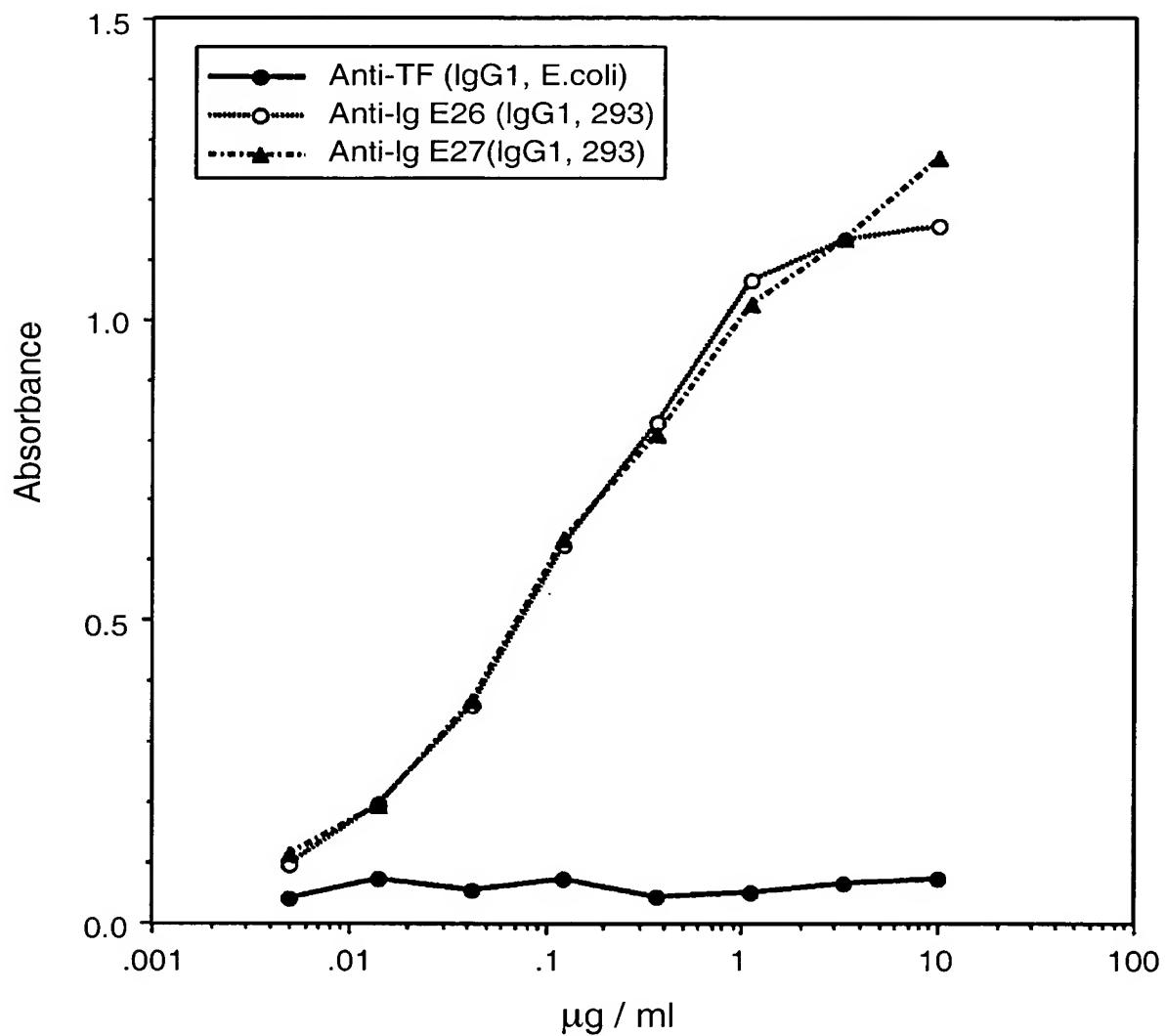


FIG._17

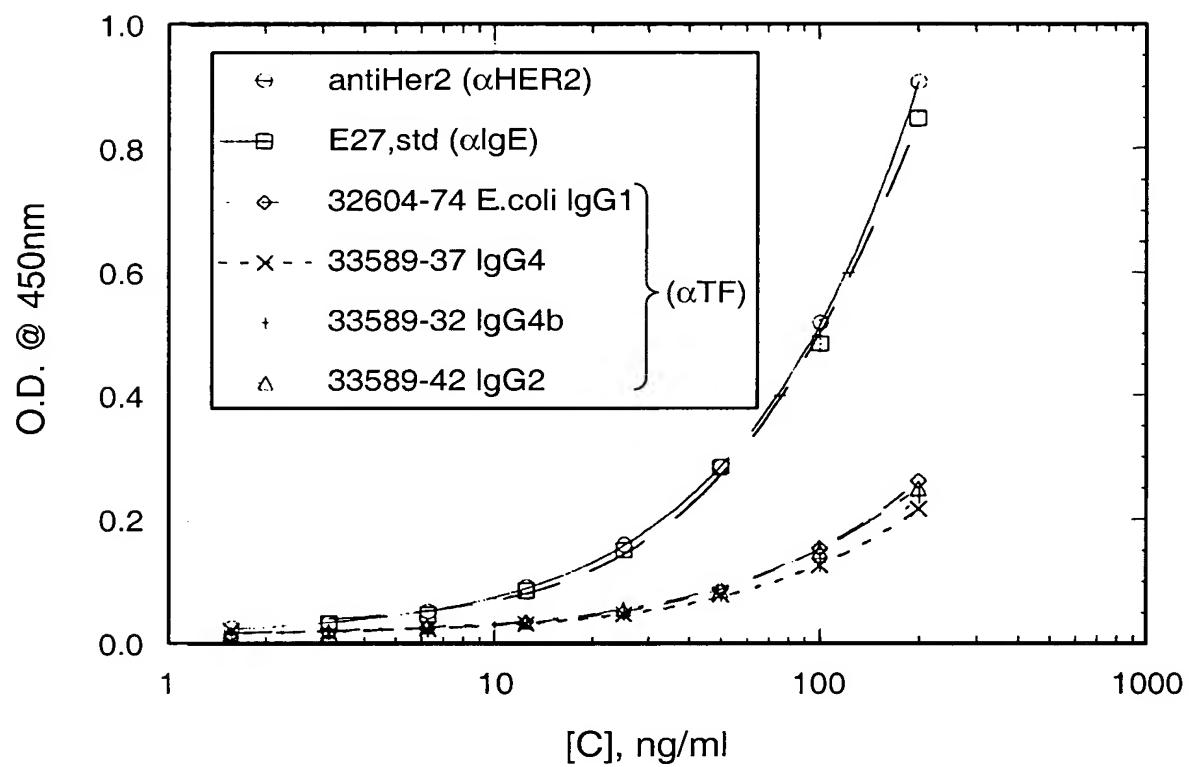


FIG._18

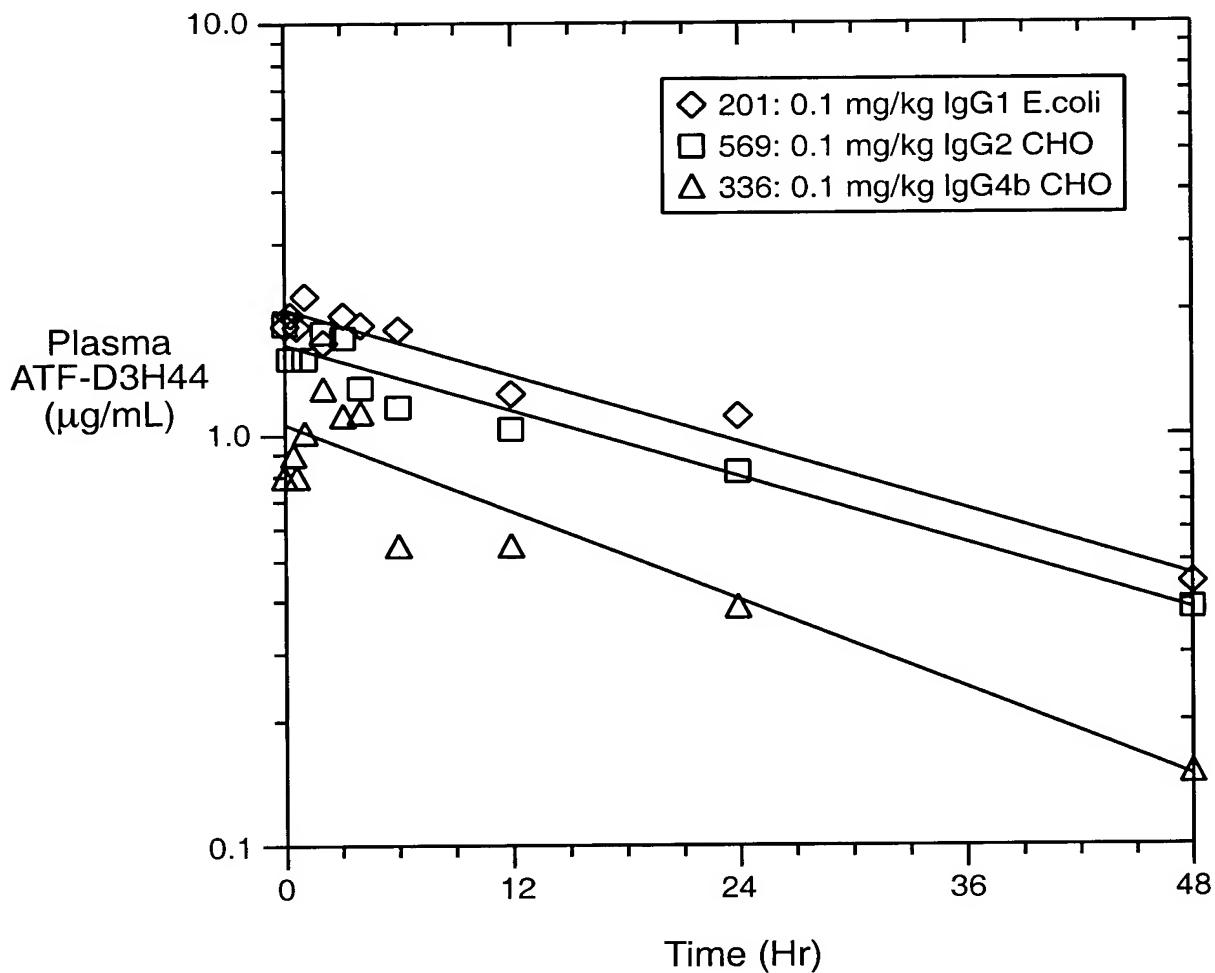


FIG._ 19

1 GAACTCAACT TCTCCATACT TTGGATAAGG AAATACAGAC ATGAAAMTC TCATTGCTGA GTTGTATT AAGCTGCCA AAAAGAAGA AGAGTCGAAT
 CTTAAGTGTGA AGAGGTATGA AACCTATTCC TTATGTCG TACTTTCAG AGTAACCACT CACAAATAA TTGAAACGGG TTTCCTCTCT TCTCAGCTTA
 101 GAACTGTG CGCAGGTAGA AGCTTGGAG ATTATGCTCA CTTGAAATGCT TOGCAATTGCT GCGCAAAATG ACCAACAGGG GTGCAATTGAT CAGGTAGGG
 CTTGACACAC CGCTTCACT TCGAAACCTC TAATAGCACT GACGTAACTC AGCGTATAC AGCGTATAC CGCTTACCA CAACTAACTA GTCCCATCTCC
 201 GGGGGCTGTGA CGAGGTAAAG CGATTCTGA CGACGATAACG GAGCTGTGC GCGATTAGCT AAAGAGTTA TGAAGGATC CTCGTCAGTA
 CGCTTACAT GCTCCATTCT GGGCTACGT CGTAAGCACT GCTGCTATGC CTCGACGACG CGCTAATGCA TTTCCTCAAT AACCTGTAG GAGCAGTCAT
 301 AAAAGTTAT CTTTCAACA GCTGTCATAA AGTTGTCACG GCGGAGACTT ATAGTCGCTT TTGTTTATT TTGTTATGTA TTGTTAACTA GTACCGAAAGT
 TTTCATTA GAAAAGTTG CGACGATTT TCAACAGTCG CGGTCTGA TATCAGCGAA ACAGAAATAA AAAATTCAT AACATTTGAT CATGCGTCA
 401 TAAGTAAA AGGGTATCTA GAAATTGAA GAAGAAATTC GATTGTCAT TTGCAVTCAT GTICGTTT TCTATGCTA CAAAGCGTA CGCTGATTC
 AGTGCATT TTCCATAGAT CTTAATACAT TTCTTATAG CGTAAAGCAAG AACGTAGATA CAAGCAAAA AGATAACGTT GTTGGCCTATGGACTATAG
 M K K N I A F L L A S M F V F S I A T N A Y A D I
 1 ^STII Signal Sequence TIR-1 Anti-Tissue Factor Light Chain,
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501 CAGATGACCC AGTCCCCGAG CTCCCTGTC GCCTCTGTGG GCGATAGGGT CACCATCACC TGCAGAGCCA GTGCCGACAT CAGAGCTAT CTGAACTGT
 GTCTACTGGG TCAGGGGCTC GAGGGACGG CGGAGACCC CGCTATCCCA GTGCTATGCA CGCTCTGGT ACCTCTGGT CAGCTCTGTA GACTGACCA
 26 Q M T Q S P S L S A S V G D R V T I T C R A S R D I K S Y L N W Y

60 601 ATCAACAGAA ACCAGAAA GCTCCCAAAG TACTGTTTA CTATGCTACT AGTCTCGCTG AAGGGATGTC TTCTCGCTTC TCTGGATCCG GTCTGGGAC
 TAGTGTCTCT TGGTCCCTT CGAGGCTTC ATGACTTAAT GATACTGATA TCAGAGATAA S P W T F G Q G T
 Q Q K P G K A P K V L I Y Y A T S L A E G V P S R F S G S G T

701 GGATTACACT CTGACCATCA GCAGTCCTGCA GCCAGAAGAC TTGGCTGCTCT ATTACTGCTC TCAAGACGGA GAGTCCTCAT GEAACATTGG ACAGGGTAC
 CCTAATGTA GACTGCTAGT CGTCAGACGT CGCTCTCTG AAGGGTGTGA TAATGACAGA AGTCGTGCTT CTCAAGGGTA CCTGTAACC TGTCCATGG
 93 D Y T L T I S S L Q P E D F A T Y Y C L Q H G E S P W T F G Q G T

801 AAGGTGGAGA TCAAACGAAC TTGGCTGCA CCATCTGCTC TCACTCTCC GGCATCTGAT GAGCAGTGA AATCTGAAAC TGCCTCTGT GTGTGCTTC
 TCCACCTCT AGTTGCTTG AACCCGACGT GGTAGACAGA AGTCAAGGG CGCTAGACTA CTGCTCAACT TTGACCTTG AGCAAGACAA CACACGAG
 126 K V E I K R T V A A P S V F I F P S D E Q L K S G T A S V V C L L

901 TGAATACCT CTATCCAGA GAGGCCAAAG TACAGTGGAA GGTCGATAAC GCGCTCAAT CGGGTAAC CCAGGAGAGT GTCACAGAGC AGGACACCA
 ACTTATGAA GATAGGGCTCT AGTCACCTT CCACCTATTG CGGAAAGTT GGTCCCTCA CAGTGTCTG TCTGTGTT
 160 N N F Y P R E A K V Q W K V D N A L Q S G N S Q E S V T E Q D S K

1001 GGAACAGCAC TACAGCTCA GAGGGACCT GAGGTGGAGC AAGGGAGCT ACAGGAAACA CAAAGCTAC GCCTGGAG AGGCTGAGGC
 CCTGCTGTTG AGTCTGGAGT CGTCGACTCG TTTCGCTGTTG TTGCTCTGA TGTTCAGATG CGGAGCTTC AGTGGTACT CGGAGCTTC
 193 D S T Y S L S S T L T L Q A D Y E K V Y A C E V T H Q G L S

1101 TCGCCCGTCA CAAAGGCTT CAAACAGGGA GAGGTGAAAT TAACTCTCT ACCGGGACCT GATGTTGGCG AGGTGGTAC CGGGGAACTT AGGCCTTAACG
 AGGGGGAGT GTTCTCGAA GTTGTCCCT CTCACAAATA ATTAGGAGA TCGGACCCGC TCGGACCTGC TCGGCTATG GGCCTCTAGA TCCGGATTGC
 226 S P V T K S F N R G E C O

FIG.-20a

1201 CTCGGTGGC GCGGGGGT TTTATGTT GCGGACGGC AATCGAATG AACTGTTGC CGAGGTAGMA GCTTGGAGA TATGTCAC TGCAC
 GAGCCAAACGG CGGCGCGAA AAAATAACAA CGGCGCGAA AAAATAACAA CGGCGCGAA AAAATAACAA CGGCGCGAA
 1301 CGCAATATGG CGCAAATGA CCAACAGGG TTGATTGATC AGGTAGAGGG GGGGTGTC GAGGAAAGC CCGATGCC
 CGGTATAACCG CGGTATTAACCG AACTAATGAG TCCATCTCCC CGCGACATG CTCATTTCG GGCTAGGTG
 1401 AGCTGCTGG CGATTAGTA AAGAAGTTAT TGAAGCATCC TGTCTAGTA AAAGTAATC TTTCAACAG CTTCAACAG
 TCGACGAGC GCTAATGCA TCTTCATAA AATTCGAGG AGGAGTCATT AATTCGAGG AGGAGTCATT TCTCAATTAG
 1501 TAGTCGTTT GTTTTATT TTAATGTT TGTAACTAG TAGCAAGTT CACGTAAGA GGGTATCTAG AATTGAG
 AGCTAGATAC AAGCAAAA GATAACGATG TTGCGCATG CGACTCCAG TGACACACT CCAATAGATC AATATGATC
 ATCAGGAAA CAAAAATAAA AAATTACATA AACATGATC AATGTTCA GTGCAATT
 1

1601 TGCATCTAG TGTGTTTTT CTATGCTAC AACCGTAC GCTGAGGTTC AGCTGTTAC GCTGAGGTAG
 AGCTAGATAC AAGCAAAA GATAACGATG TTGCGCATG CGACTCCAG TGACACACT CCAATAGATC AATATGATC
 10 A S M F V F S I A T N A Y A E V Q L V E S G G L V Q P G G S L R

^ST11 Signal Sequence TIR-1

1701 TGTGCTGAGCTCTGG CTCAATATT AAGGAGTACT ACATGCACTG GGTGGTCAAG GGGGCTGGA ATGGGTTGGA TTGATTGATC
 AACAGGACAC GTCGAGACC GAAAGTTATA TTCTCTATGA TGTAGTGC CCAGGAGTC CCGGGCCAT TCCGGACCT AACTAATAG
 43 L S C A A S G F N I K E Y Y M H W V R Q A P G K G L E W V G L I D P

1801 CAGAGCAAGG CAACAGATC TATGACCCAA AGTTCAGGAA AGTTCAGGAA CGTGTCCACT ATAAGGCTG
 GTCTGCTCC GTGTGCTAG ATATGGCT TCAAGGCTT GGGACGGTCA TATTGCGAC TTGTTAAGGTT TTGTTGCTG
 77 E Q G N T I D P R A T I S A D N S K N T A Y L Q M N S L

1901 CGGTGCTGAG GACACTGGC TCTATATTAG TGTGCTGAGAC AGGAGCTG AGATAATAAC CGGACGCTT
 CGACGACTC CTGTAACGGC AGATAATAAC CGGAGCTG TGTGCTGAG ACCTGCTT GGGGGCA
 110 R A E D T A V Y Y C A R D T A Y F D Y W G Q G T L V T V S S A S

2001 ACCAAGGGCC CATGGTCTT CCCCTCTGGCA CCCTCTTCA AGAGGACCTC TGGGGCA
 TGGTCTCCGG GTAGCCAGAA GGGGACGGT TCTGTTGAG ACCCCGCTG CGCCGGACCC
 143 T K G P S V F P L A P S S T S G G T A A L G C L V K D Y F P E P

2101 CGGTGACGGT GTGTGGAC TCAACACCC CGGGACGGT GGGGGCTGG TCTTACAGTC
 CGGACACTGCA CAGGACCTG AGTCCGGAG ACTGGTCCCG GCACTGAG
 177 V T V S W N S G A L T S G V H T F P A V L Q S S G L Y S L S S V V

2201 GACTGTGCCCTCTAGGCTT TGGGACCCCA GACCTACATC TGGGACCCCA
 CGGACACCCAGTCAACCTG AGTGTGCA ACCGGCTGGT TCTTACAGTC
 210 T V P S S L G T Q T Y I C N V N H K P S N T K V D K K V E P K S

^Anti-Tissue Factor Heavy Chain

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2301 TGTGACAAA CTCACACATG CCAGCCGTCG AACTCCCTGG GGGACCGTCA GCTCTCTCT TCCCCCAA ACCAAGGC ACCCTCATGA
 ACATGTTT GAGTGTGTAC GGGTGGCAGC GGTGCTGGAC CCCTGGACC CGAAGGAGA AGGGGGTT TGGGTCTCTG TGGGAGTACT
 243 C D K T C P P C P A P E L L G P S V F L F P P K P K D T L M I

2401 TCTCCCGAC CCCTGGAC ACATGGTCG TGGTGGACGT GAGCCACGA GACCCAGG TCAAGTCA CTGGTACGTG GACGGCTGG AGGTGGTAA
 AGAGGGCTTG GGGACTCCAG TGATGGAC ACCACCTGCA CTGGGTGCT AGTCAAGT GACCATGCACT CGGCGGCCAC TCCACGTT
 277 S R T P E V T C V V D V S H E D P E V K F N W Y V D G V E V H N

2501 TGCCAAAGCA AAGCCCGGG AGGAGCAGTA CAACAGCAGC TACCGTGTG TCAAGGTCTG CACCGGACT GCGTGAATGG CAAGGAGTAC
 ACGGTTCTGT TTGGGGGCCCG TCCCTGTCAT Q D W L N G K E Y

310 A K T K P R E E Q Y N S T Y R V V S V L T V L H Q D W L N G K E Y

2601 AGTGGAGG TCTCCACAA AGCCCTCCAA GCCCCATCG AGAAAACCAT CTCCAAGCC AAAGGGCAGC CCCGAGAACCC ACAGGTGTAC ACCCTGGCCC
 TTGAGCTTC AGAGGTGTT TCCGGGGT CCGGGGTAGC TCTTGTGTA GAGGTTCTGG TCTCCACATG TGGGAGGGGG
 343 K C K V S N K A L P A P I E K T I S K A K G Q P R E P Q V Y T L P P

2701 CATCCCGGAA AGAGATGACC AAGAACCGG TCAGCTGAC CTGGCTGGTC AAAGGCTCT ATCCAGCGA CATGCCGTT GAGTGGAGA GCAATGGCA
 GTAGGGCCCT TCTCTACTGG TCTTGGTCTC AGTGGACTG GACGGACAG TTTCCAGAG TAGGGTCCT GTAGGGCCAC CTACCCCTCT CGTACCCGT
 377 S R E E M T K N Q V S L T C L V K G F Y P S D I A V E W E S N G Q

2801 GCGGGAAC AACTACAAGA CCAGCCCTTC CTTGACGGGT CCTCTCTCT CTCACCGAGG CTCACCGTGG ACAAGAGCAG GTGGCAGGAG
 CGGCGCTCTG TCTGTTCTG GGTGGGGAGG GCAAGGACCTG AGGCTGCCA GGAAGAGGA GATGTCGTC GAGTGGTACCT CGGCGCC
 410 P E N N Y K T T P P V L D S D G S F F L Y S K L T V D K S R W Q Q

2901 GGGAACGCT TCTCTATGTC CGTGTATGCAAT GAGGCTCTGC ACAACCACTA CACGGAGAG AGCCTCTCCC TGTCTCGGG TAATTAAGCA TGGCAAGGCC
 CCCTTGAGA AGAGTAAGAG GCACTACTGTA CTGGAGACG TGTGGGGAT GTGCGCTTC TGGAGAGGG ACAGAGGCC ATTATTCGT AGCTGCGGG
 443 G N V F S C S V M H E A L H N H Y T Q K S L S P G K O

3001 CTAGAGTCCC TAACGCTGG TTGGCGGGG GCGTTTTTA TGTAACTC ATGTTGACA GCTTATCATC GATAAGCTT ATGCGGTAG TTTATCACAG
 GATCTCAGGG ATTGGAGCC ACGGGGGCC CGCAAAAT ACAATTGAG TACAAACTGT CGAATAGMAG CTATTGAAA TTACGCCATC AAATAGTGTC

3101 TAAATTGCT AACGGAGTCA GGCACCGTGT ATGAAATCTA ACAATGCGCT CATGTCATC CTGGCACCG TCACCTGGA TGCTGTAGC ATAGGCTTGG
 ATTTAACGA TTGGCTCAGT CGTGGACAA TACTTATGAT TTGTTACGGCA GTAGGACTAG GAGGGACCT AGTGGCAGCT ACGACATCG TATCGAAC

"Start Tet Resistance Coding Sequence

3201 TATGCCGGT ACTGCCGGG CTCTTGCGGG ATATGCTCCA TCTCGACAGC ATCGCAGTC ACTATGGCT GCTGCTAGCG CTATATGGCT TGTGCAATT
 ATACGCCA TGACGCCA TATAGGAGT AAGGCTGTAG TAGGGCTAG TGATACCGA CGACGATCGC GATATACGA ACTACGTTAA

20250 " 222 0200"

P1793R1

1 GATTCACT TCTCCACT TTGGATAAGG AAATACAGAC ATGAAAATC TCATTGCTGA GTTGTATT AAGCTGCC AAAAGAAGA AGAGTGAAT
CTTAAGTTGA AGAGGTATGA ACCATATTCC TTATGCTG TACTTTAG AGTAACGACT CAAACAATAA TTCGAACGGG TTTTCTCTCT TCTCAGCTTA
101 GAACTGTG CGCAGGTAGA AGCTTGGAG ATTATGCTCA CTGGAATGCT TCGGAATATG GCGGAATATG ACCAACAGGG GTGATTGAGG
CTTGACACAC GGGTCATCT TCGAAACCT TAATAGCAGT GACGTTACG AGCGTATAC CGCGTTTAC CGCGTTGC CAACTAATAA GTCCATCTCC
201 GGGGCTGTA CGAGGTAAG CCCGATGCCA GCATTCTGA CGACGATAAG GAGCTGTGC GCGATTACG AAAGAAGTT TGAAGCTC CTCGTCAGTA
CCCCGACAT GTCGCAATTG GGGCTACGGT CGTAAGGACT GTCTGCTATGC CTCGAGACG CGCTAATGCA TCTCTCAAT AACCTGTAG GAGCACTCAT
301 AAAAGTTAAT CTTTCAACA GCTGTCAAA AGTTGTCAGG GCGGAGACTT ATAGTCGCTT TGTGTTTATT TTTATGTA TTGTAACTA GTACGAAAGT
TTTCAATTAA GAAAGTTGT CGACAGTATT TCAACAGTGC CGGCTCTGA TATCAGCGAA ACAAAAATAA AAAATTACAT AACATTGAT CATGGTTCA
401 TCACTGAAAGGATCTA GAATTATGAA GAAGAATATC GCATTCTTC TTGCATCTAT GTTGTGTTT TCTATGCTA CAAACCGTA CGCTGATATC
AGTGCATT TCCCATAGAT CTTAATACCTT CTCCTATAG CGTAAGAG AACGTAGATA CAAAGAAAAA AGATAACGAT GTTGTGCGAT GCGACTATAG
1 M K K N I A F L L A S M F V F S I A T N A Y A D I
^STII signal TIR ~1
Anti-VEGF Light chain^

501 CAGTGCACCC AGTCCCGAG CTCCTGTC GCCTCTGTT GCGTATGGGT CACCATCACC TGCAGGGCAA GTCAAGGATAT TAGCAACTAT TAAACTGGT
GTCAACTGGG TCAGGGCTC GAGGGACAGG CGGAGACACC CGCTATCCCA GTGGTAGTGG ACGTGCGTT CAGTCCTATA ATCGTGTGATA AATTGACCA
26 Q L T Q S P S L S A S V G D R V T I T C S A S Q D I S N Y L N W Y 18 / 21
601 ATCAACAGAA ACCAGAAAA GCTCCGAAG TACTGATTA CTCACCTCC TTCTCCACT CTGGAGTCCC TTCTCGCTTC TCTGGATTCG GTTCTGGAC
TAGTTGTCTT TGGTCTTT CGAGGCTTC ATGACTAAAT GAAAGTGGAGG AGAGGGTGA GACCTCGAGG AAGAGGAAG AGACCTAGGC CAAGACCTTG
60 Q Q K P G K A P K V L I Y F T S S L H S G V P S R F S G S G S G T
701 GAGTTCACT CTGACCATCA GCAAGAGAC TTGCAACTT ATTACTGTC ACAGTATAGC ACCGATAGC TGTCATATCG TGGCACGGCA CTCGAACCC TGTCCTATGG
CCTAAAGTGA GACTGTAAGT CGTCAGACGT CGGTCTCTG AAGGGTTGA TAATGACAGT TGTCATCTG AATCTGGAC TGCTTCTGTT GTGTGCTG
93 D F T L T I S S L Q P E D F A T Y Y C Q Q Y S T V P W T F G Q G T
801 AAGGGAGA TCAAACGAAAC TGTGGCTGCA CCATCTGCT TCACTCTCCC GCCATCTGAT GAGGAGTGA CTGTCAACT TTAGACCTTG ACGAAAGCAA CACACGAGC
TTCACCTCT AGTTGCTTG ACACCGACGT GTTGTGAGA AGTAAAGGG CGGTAGACTA CTGTCAACT TGTCATCTG AATCTGGAC TGCTTCTGTT GTGTGCTG
126 K V E I K R T V A A P S V F I F P P S D E Q L K S G T A S V V C L L
901 TGAATAACTT CTATCCAGA GAGGCCAAG TACAGTGGAA GTGGATAAC GCGCTCCAT CCGGTAACTC CCAGGAGAGT GTCACAGAGC AGGACAGCAA
ACTTATGAA GATAGGGTCT CTCGGTTCT ATGTCACCTT CCACCTATG CGGGAGGTTA GCCCATTTGAG GTTCTCTCA CAGTGTCTG TCCTGTGTT
160 N N F Y P R E A K V Q W K V D N A L Q S G N S Q E S V T E Q D S K
1001 GCACGCC TACACCTCA GCAGCACCT GACGCTGAGC AAAGGAGACT ACGAGAAACA CAAAGCTAC GCCTGGAAAG TCACCCATCA GGGCTGAGC
CCTGTCGTGG ATGTCGGAGT CGTCAGCTG TTTCGACTCG TGTCAGATG TGCTCTTGT GTTCAAGT CCGACGCTTC AGTGGTAGT CCCGGACTCG
193 D S T Y S L S S T L T L S K A D Y E K H K V Y A C E V T H Q G L S
1101 TCGCCCTCA CAAAGAGCTT CAAACGGGAA GAGTGTAAAT TAAATCTCT ACAGCTGGAGC CATCGTGGGG AGCTCGTACT CGGGGGATCT AGGCCTAAACG
226 S P V T K S F N R G E C O

FIG.-21a

1201 CTCGGTGGCC GCCGGGGTT TTTATTGTT GCGGACGGC ATCTCGAATG AACTGTGTC GCAGGTAGAA GCTTGGAGA TTATCGTCAC TGCATGCTT
 GAGCC2ACGG CGGCCCGCAA AATAACAA CGAACACAGG TAGAGCTTAC TTGACACACG CGTCCATCTT CGAAACCTCTT ATAGCAGTG ACGTACGAA
 1301 CGCAATATGG CGCAATATGG CAAACAGGG TTGATGATC AGGTAGGG GGGCTGTAC GAGGTAGAA GCGGCTGCCAG CATTCCGTAC GACCAATACGG
 CGGTATACC CGGTATACC GGTGTTACT GGTGTCGCC AACTAATCTCC CGCATCTCC CGGCACATG CTCCATTCTG GGCTACGGTC GAAAGGACTG CTGCTATGCC
 1401 AGCTGCTGG CGATTACGTA AGAAAGTTATG TGAAGCATCC TCGTCAGTAA AAAGTTAATC TTTCAGTCAG CTGTCATAAA GTTGTACGG CGGAGACTTA
 TCGACGACGC GCTAATGGAT TTCTCAATA ACTTCATGG AGCAGTCATT TTTCATGG AAAAGTTGTC GACAGTATT CAACAGTGGC GGCCTTGAAAT
 1501 TAGTCGTTT GTTTTATT TTAATGTT TTGTAATCTAG TAGGCAAGTT CACGTAAAAA GGGTATCTAG AATTATGAAAG AGAATATTCG CATTTCCTCT
 ATCAGGAAA CAAAATAAA AAATTACATA AACATGATC ATGCGTCAA GTGCATTTC CCCATAGATC TTAATACCTC TTCTTATAGC GTAAAGAAGA
 1 M K K N I A F L L

^STII Signal TIR~1

1601 TGCATCTATG TTCTGTTTT CTATTGCTAC AAACGGTAC GCTGAGGTTC AGCTGGTGA GTCTGGGGT GGCCTGGGT AGCCAGGGG CTCACCTCGT
 ACGTAGATAC AAGCAAAA GATAACGATG TTGCGGATG GAATCCTAAG TCGACCACT CAGACCGCCA CGGACCCACG TCGGTCCCCC GAGTGAGGCA
 10 A S M F V F S I A T N A Y A E V L Q L V E S G G L V Q P G G S L R

^Anti-VEGF Heavy Chain

1701 TTGTCCTGTG CAGCTCTGG CTAGCACTTC ACGCACTACG GATGAACTG GGTGGTCAAG GCCCCGGGTA AGGGCTGGAA ATGGGTTGGA TCGATTAAACA 19 / 21
 ACAGGACAC GTCGAGACCC GATGCTGAAG TGGCTGATGC CATACTTGAC CCAGGGAGTC CGGGGGCCAT TCCCCGGACCT TACCCAACTT ACCTAATTTG
 43 L S C A A S G Y D F T H Y G M N W V R Q A P G K G L E W V G W I N T
 1801 CCTATACGG TGAAACGGACC TATGCTGGG ATTCAAACG TCGTTTCACT TTTCTTTAG ACACCTCCAA AAGCACAGCA TACCTGAGA TGAACAGCCT
 GGATATGGCC ACTTGGCTGG ATACGACGCC TAAAGTTGTC AGCAAAAGTGA AAAAGAAATC TGTGAGGGT TTCTGTTGTT ATGGAAGCTT ACTTGTGAGA
 77 Y T G E P T Y A A D F K R R F T F S L D T S K S T A Y L Q M N S L
 1901 GCGGCTGAG GACACTGGCG TCTATTACTG TGCAAAAGTAC CGTACTATT ACGGACGGAG CACTGGTAT TTGCACTGGTCT GGGGTCAAGG AACCTGTTGTC
 CGGGCGACTC CTGTCAGGGC AGATAATGAC ACGTTTCATG GGCATGATAA TGCGACCCATA GGTGACCCATA AACCTGCAAGA CCCCAGTCCC TTGGGACCAAG
 110 R A E D T A V Y Y C A K Y P Y Y G T S H W Y F D V W G Q G T L V
 2001 ACCGCTCTCT CGGCTCCAC CAAGGGCCA TCGGTCTTCC CCCTGGCAAC CTCCTCCAAG AGCACCTCTG GGGCACAGG GGGCTGGGC TGCCTGGTC
 TGGCAGGGA GCGGAGGTG GTTCCGGGT AGCCAGAAGG GGGACCGTGG GAGGAGGTTC TCGTGGAGAC CCCCTGTC CGGGGACCC AGGGACCAAGT
 143 T V S S A S T K G P S V F P L A P S S K S T S G G T A A L G C L V K
 2101 AGGACTACTT CCCGAAACCG GTGACGGGTGT CGTGGAAACTC AGGGGCCCTG ACCAGGGGG TGCAACACCTT CCCGGCTGTC CTACAGTCT CAGGACTCTA
 TCCCTGATGAA GGGCTTGGC CACTGCCACA GCACCTTGAG TGGTGGGAG ACCTGGGAC TGGTGGCCAG GGGCGACAG GATGTCAGGA GTCCCTGAGAT
 177 D Y F P E P V T V S W N S G A L T S G V H T F P A V L Q S S G L Y
 2201 CTCCCTCAGC AGCGTGGTGA CTGTGCCCCCTG TAGTGGCTTG GGCACCCAGA CCTACATCTG CAACGTGAAT CACAAGCCCA GGTGGACAAG
 GAGGGAGTCG TCGCAACCT GACACGGGAG ATCGTGGAAC CGTGGGGTCT GGATGTAGAC GTTGGACTTA GTTGGACTTA GTTGGGGTTT CCACCTGTTG
 210 S L S S V V T V P S S L G T Q T Y I C N V N H K P S N T K V D K

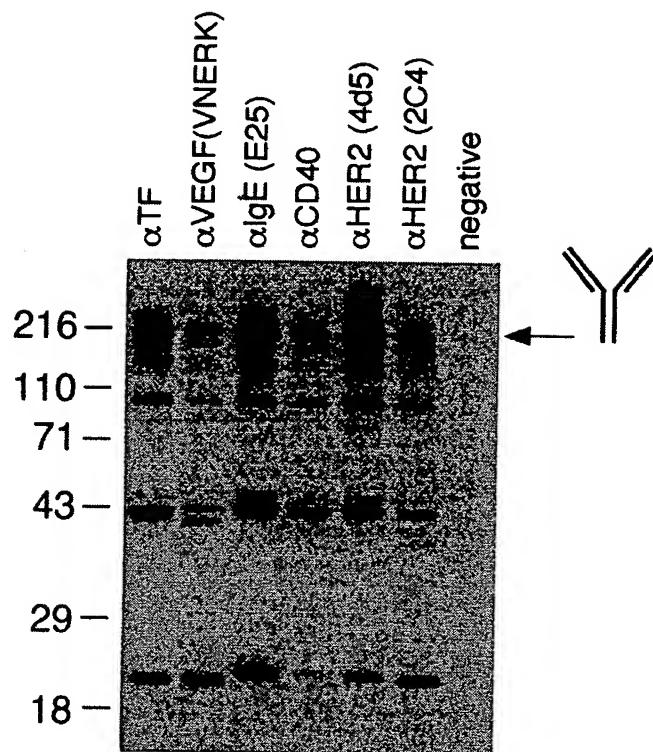
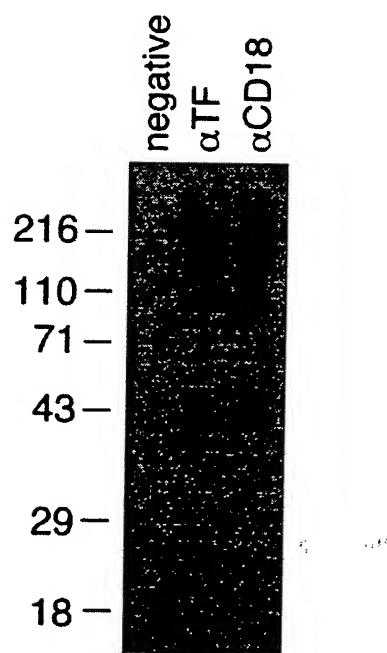
FIG. 21b

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2301 AAGTTGAGC CCAAATCTTG TGACAAACT CACACATGCC CACCGTGCC AGCACCTGCC CTCCTGGGG GACCGTCAGT CTCCTCTTC CCCCCAAAC
 TTTCAACTCG GTTTAAAC ACTGTTTGA GTGTGTACGG GTGGCACGGG TCGTGGACTT GAGGACCCC CTGGCAGTCA GAAGGAAAG GGGGTTTG
 243 K V E P K S C D K T H T C P P C P A P E L I G G P S V F L F P P K P
 2401 CCAAGGACAC CCTCATGATC TCCCGGACCC CTGAGGTAC CTCATGATC ATGGTGGG GTGGACGTGA GCCACGAAGA CCCTGAGTC AAGTCAACT GGTACGTGGA
 GGTTCCTGTG GGAGTACTAG AGGGCTGGG GACTCCAGTG TAGGCCAAC CACCTGCACT CGGTGCTTCT GGGACTCCAG TCAAGTGA CCATGCACCT
 277 K D T L M I S R T P E V T C V V D V S H E D P E V K F N W Y V D
 2501 CGGGTGGAG GTGGATAATG CCAAGACAAA GCGGGGGAG GAGGAGTACA ACAGGACGTA CGGTGTGGTC AGGGTCTCA CGGTCTGCA CCAGGACTGG
 GCCGCACCTC CACGTTAAC CGTTCCTGTT CGGGCCCTC CTCGTCACTGT TGTCTGCACT GGGCACACCGAG TCGCAGGAGT GGCAGGAGT GGTCCTGACC
 310 G V E V H N A K T K P R E E Q Y N S T Y R V V S V L T V L H Q D W
 2601 CTGAATGGCA AGGAGTACAA GTGCAAGGTC TCCAACAAGG CCCTCCAGC CCCATCGAG AAACCATCT CCAAGCAA AGGGAGCCC CGAGAACAC
 GACTTACCGT CCCTCATGTT CACGTTCCAG AGGTGTTC GGGAGGGTCT GGGAGCTGCTC TTTTGGTGA GTTGGTGTGGT TCCCGTGGGG GCTCTGGTG
 343 L N G K E Y K C K V S N K A L P A P I E K T I S K A K G Q P R E P Q
 2701 AGGTGTACAC CCTGGCCCCA TCCCCGGAG AGATGACCAA GAACCAAGGTC AGCCGTACCT GCCTGGTCAA AGGTCTAT CCCAGGACA TCGCGTGGAA
 TCCACATGTG GGAGGGGGT AGGGCCCTC TCTACTGGTT CTTGGTCCAG TCGGACTGGA CGGACCAAGTT TCCGAAGATA GGGTGTGTAGT AGGGCACCT
 377 V Y T L P P S R E E M T K N Q V S L T C L V K G F Y P S D I A V E
 2801 GTGGGAGGC AATGGGAGC CCGAGAACAA CTACAGACC ACGCCCTCCCG TGCTGGACTC CGACGGCTCC TCTCTCTCT ACAGGAAGCT CACCGTGGAC
 CACCCCTCTCG TTACCGTGC GGCTCTGG GATGTTCTGG TGCTGGAGGG ACGGACCTGAG GCTGGCGAGG AAGAAGGAGA TGTGTTGCA GTGGACCTG
 410 W E S N G Q P E N N Y K T T P P V L D S F D G S F F L Y S K L T V D
 2901 AAGAGCAGGT GGCAGCAGGG GAACTGCTTC TCATGCTCCG TGATGGATGA GGCTCTGGAC AACCACTACA CGCAGAAGAG CCTCTCCCTG TCTCTGGTA
 TCTCTGGTCA CCGTCTGCC CTGGAGAAC AGTACGAGGC ACTACGTAAT CCGAGACGTG TTGGTGTATGT GGCTCTCTC GGAGAGGGAC AGAGGCCAT
 443 K S R W Q Q G N V F S C S V M H E A L H N H Y T Q K S L S L S P G K
 3001 ATAAGGATG CGACGGCCCT AGAGTCCCTA AGGCTCGGTT GCGGCCGGC GTTTTTATT GTAAACTCAT GTTGACAGC TTATCATGTA TAAGCTTAA
 TTATTGTA GCTGGGGGA TCTCAGGGAT TGGGAGCAA CGGGGGCCCG CAAAGATAA CAATTGAGTA CAAACTGTGCA ATAGTAGCT ATTGAAATT
 477 O
 3101 TGGGGTAGTT TATCACAGTT AATTCGTTAA CGCAGTCAGG CACCGTGTAT GAAATCAAC ATGGGCTCA TCGCATCCT CGGCACCGTC ACCCTGGAT
 ACGCCATCAA ATAGTGTCAA TTAACGATT GCGTCAGTCC GTGGCACATA CTTAGTATTG TACGGGAGT ACCAGTAGGA CGCGTGGGAG TGGGACCTAC
 GACATCCGTA TCCGAACCAA TACGGCCATG ACGGCCCGGA GAACGCCCTA TAGCAGGTA GGCTGTGTA CGGTCACTG ATACCGCAAG ACGATCGCGA

*Start Tet Resistance Coding Sequence
 3201 CTGTAGGCA AGGTTGGTT ATGCGGGTAC TGCCCCGGCT CTTGGGGAT ATCGTCCATT CGCACAGCAT CGGCACTGAC TACGGGAGT TGCTAGGCT
 ACGCCATCAA ATAGTGTCAA TTAACGATT GCGTCAGTCC GTGGCACATA CTTAGTATTG TACGGGAGT ACCAGTAGGA CGCGTGGGAG TGGGACCTAC

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**FIG._22A****FIG._22B**